

Day 1Fab four!

1.) (round to nearest 10,000)

$$124,666 =$$

2.) Common factors of 8 and 20 =

3.) 564.2 divided by 10

4.) 2000g = kg

Day 2Fab four!

1.) (round to nearest 1,000)

$$124,666 =$$

2.) Common factors of 3 and 18 =

3.) 27.5 divided by 10

4.) 5500g = kg

Day 3Fab four!

1.) (round to nearest 100,000)

$$124,666 =$$

2.) Common factors of 5 and 30 =

3.) 184.5 divided by 10

4.) 500g = kg

Day 4Fab four!

1.) (round to nearest 100)

$$124,666 =$$

2.) Common factors of 12 and 48 =

3.) 986.95 divided by 10

4.) 250g = kg

Fractions

- I can compare and order fractions.
- I can associate a fraction with division and calculate decimal fraction equivalents for a simple fraction.
- I can use common multiples to express fractions in the same denomination.
- I can use common factors to simplify fractions.
- I can add and subtract fractions with different denominators and mixed numbers.
- I can divide proper fractions by whole numbers.
- I can multiply simple pairs of proper fractions, writing the answer in its simplest form.
- I can identify the value of each digit in numbers given to three decimal places.

LO: I can add and subtract fractions.



fractions

LO: I can add and subtract fractions.

< > or =

1.) $4/5$ or $2/3$ =

2.) $6/12$ or $7/15$ =

3.) $5/10$ or $3/20$ =

LO: I can add and subtract fractions.

$$1) \frac{1}{2} + \frac{1}{4} =$$

$$6) \frac{5}{6} - \frac{1}{3} =$$

$$2) \frac{2}{3} + \frac{1}{6} =$$

$$7) \frac{9}{10} - \frac{1}{2} =$$

$$3) \frac{3}{10} + \frac{2}{5} =$$

$$8) \frac{9}{14} - \frac{1}{7} =$$

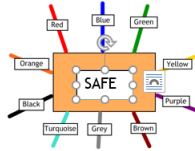
LO: I can add and subtract fractions.

Mild

LO: I can add and subtract fractions.

Can you help 007?

You must open the safe using the mathematical clues left.



Answer the questions, then cut the coloured wires in the order that the answers appear, using the table below:

Red	Blue	Green	Yellow	Purple	Brown	Grey	Turquoise	Black	Orange
$1\frac{8}{63}$	$\frac{3}{20}$	$\frac{7}{8}$	$\frac{19}{40}$	$\frac{11}{12}$	$\frac{11}{15}$	$1\frac{5}{63}$	$\frac{3}{5}$	$1\frac{1}{12}$	$\frac{3}{10}$

Here are the clues that show which order to cut the wires - you may have to simplify your answers, so look carefully:

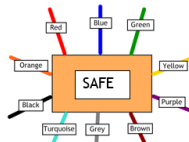
1	Calculate $\frac{3}{4} + \frac{1}{8}$
2	Calculate $\frac{7}{10} - \frac{2}{5}$
3	Calculate $\frac{1}{8} + \frac{7}{12}$
4	Calculate $\frac{9}{10} - \frac{3}{4}$
5	Calculate $\frac{3}{4} + \frac{1}{2}$
6	Calculate $\frac{5}{6} - \frac{1}{10}$

LO: I can add and subtract fractions.

Spicy

LO: I can add and subtract fractions

Can you help 007? You must open the safe using the mathematical clues left.



Answer the questions, then cut the coloured wires in the order that the answers appear, using the table below:

Red	Blue	Green	Yellow	Purple	Brown	Grey	Turquoise	Black	Orange
$1\frac{21}{30}$	$1\frac{19}{30}$	$2\frac{11}{12}$	$5\frac{1}{6}$	$2\frac{7}{15}$	$2\frac{1}{15}$	$2\frac{5}{12}$	$4\frac{7}{8}$	$5\frac{1}{3}$	$4\frac{3}{8}$

Here are the clues that show which order to cut the wires - you may have to simplify your answers, so look carefully:

1	Calculate $3\frac{1}{4} + 1\frac{5}{8}$
2	Calculate $2\frac{7}{15} - \frac{2}{5}$
3	Calculate $3\frac{1}{4} + 1\frac{11}{12}$
4	Calculate $3\frac{3}{10} - 1\frac{2}{5}$
5	Calculate $1\frac{2}{4} + \frac{2}{3}$
6	Calculate $4\frac{1}{6} - 1\frac{7}{10}$

LO: I can multiply and divide fractions.

How many:

1. Halves in 5
2. Thirds in 4
3. Fifths in 10
4. Sevenths in 8
5. Ninths in 18

Main question

Convert these top heavy fractions to mixed numbers:

1. $\frac{10}{3}$
2. $\frac{16}{5}$
3. $\frac{32}{7}$
4. $\frac{58}{8}$
5. $\frac{67}{13}$

LO: I can multiply and divide fractions.

In each number sentence, replace the boxes with different whole numbers less than 20 so that the number sentence is true:

$$\frac{1}{\square} = \frac{3}{\square}$$

$$\frac{\square}{3} = \frac{\square}{12}$$

$$\frac{\square}{\square} = \frac{\square}{\square}$$

$$\square \div \square = \square \cdot \square$$

$$\frac{30}{\square} = \frac{45}{\square}$$

LO: I can multiply and divide fractions.

Multiplication

Example:

$$\frac{1}{2} \times \frac{2}{5}$$

Step 1. Multiply the top numbers:

$$\frac{1}{2} \times \frac{2}{5} = \frac{1 \times 2}{2 \times 5} = \frac{2}{10}$$

Step 2. Multiply the bottom numbers:

$$\frac{1}{2} \times \frac{2}{5} = \frac{1 \times 2}{2 \times 5} = \frac{2}{10}$$

Step 3. [Simplify the fraction](#) :

$$\frac{2}{10} = \frac{1}{5}$$

so....

$$3/4 \times 2/5 =$$

$$2/8 \times 5 =$$

LQ: Can I multiply and divide fractions?

Division

Example:

$$\frac{1}{2} \div \frac{1}{6}$$

Step 1. Turn the second fraction upside down (it becomes a **reciprocal**):

$$\frac{1}{6} \text{ becomes } \frac{6}{1}$$

Step 2. Multiply the first fraction by that **reciprocal**:

(multiply tops ...)

$$\frac{1}{2} \times \frac{6}{1} = \frac{1 \times 6}{2 \times 1} = \frac{6}{2}$$

(... multiply bottoms)

Step 3. Simplify the fraction:

$$\frac{6}{2} = 3$$

so.... $\frac{4}{5}$ divided by $\frac{2}{3}$

$\frac{2}{6}$ divided by 4

LO: I can multiply and divide fractions.

Mild/Spicy

Main question

1. Work out:

a. $\frac{1}{8} \times \frac{3}{4} =$

b. $\frac{5}{12} \times \frac{1}{4} =$

c. $\frac{3}{9} \times \frac{1}{3} =$

d. $\frac{2}{5} \times \frac{4}{10} =$

e. $\frac{3}{6} \times \frac{7}{8} =$

2. Work out:

a. $\frac{1}{8} \div \frac{3}{4} =$

b. $\frac{5}{12} \div \frac{1}{4} =$

c. $\frac{3}{9} \div \frac{1}{3} =$

d. $\frac{2}{5} \div \frac{4}{10} =$

e. $\frac{3}{6} \div \frac{7}{8} =$

Star questions

a. $21 \times 5\frac{12}{4} =$ b. $3\frac{2}{3} \times 4\frac{11}{12} =$ c. $2\frac{8}{13} \times 9\frac{1}{2} =$

d. $2\frac{1}{5} \div 4\frac{2}{7} =$ e. $4\frac{1}{4} \div 3\frac{6}{8} =$ f. $5\frac{1}{3} \div 5\frac{1}{11} =$

LO: I can use all four operations to solve fraction problems.

How do we add and subtract fractions?

How do we multiply and divide fractions?

LO: I can use all four operations to solve fraction problems.

Q1.

Write the two missing values to make these equivalent fractions correct.

$$\frac{\square}{3} = \frac{8}{12} = \frac{4}{\square}$$

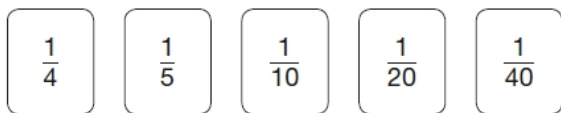
Q2.

Write the missing fraction.

$$\frac{1}{3} + \frac{1}{4} + \square = 1$$

LO: I can use all four operations to solve fraction problems.

Q3.



Use three of these fraction cards to complete the sum below.

$$\square + \square + \square = \frac{1}{2}$$

If this feels too spicy, write your own 3 fractions that would add up to $\frac{1}{2}$.

LO: I can use all four operations to solve fraction problems.

Mild

1.) $\frac{2}{3} + \frac{2}{12} =$

2.) $\frac{8}{10} - \frac{4}{5} =$

3.) $\frac{2}{5} \times 2 =$

4.) $\frac{8}{10}$ divided by 3

5.) $1\frac{2}{4} \times 2\frac{2}{5} =$

LO: I can use all four operations to solve fraction problems.

Spicy

LO: I can use all four operations to solve fraction problems.

1. $\frac{3}{4} + \frac{2}{5}$ 2. $\frac{10}{12} - \frac{1}{3}$ 3. $1\frac{6}{8} + 2\frac{3}{5}$ 4. $4\frac{1}{8} - 1\frac{3}{4}$

Work out the following:

1. $\frac{1}{4} \times \frac{1}{5}$ 2. $\frac{1}{12} \times \frac{1}{3}$ 3. $\frac{2}{6} \times \frac{1}{8}$ 4. $\frac{4}{7} \times \frac{4}{5}$
 5. $\frac{12}{20} \times \frac{2}{3}$ 6. $\frac{7}{15} \times \frac{2}{5}$ 7. $\frac{2}{9} \times \frac{1}{10}$ 8. $\frac{8}{9} \times \frac{5}{9}$

Use a diagram to represent multiplying fractions.

For example:
 $\frac{1}{9} \times \frac{1}{9}$



Try to represent these calculations:

$\frac{1}{4} \times \frac{1}{4}$

$\frac{1}{6} \times \frac{1}{6}$

What is 1 ninth multiplied by 1 seventh?

Work out the following:

1. $\frac{1}{4} \div 3$ 2. $\frac{1}{12} \div 2$ 3. $\frac{1}{6} \div 8$ 4. $\frac{1}{7} \div 4$

Alfie has $\frac{4}{6}$ of a pizza left.

He shares it between 4 people.



Solve one seventh shared between 6.

How much do they each get?

Work out the following:

7. $\frac{4}{7} \div 5$ 8. $\frac{6}{9} \div 3$ 9. $\frac{5}{8} \div 10$ 10. $\frac{9}{12} \div$

Look at the calculation below.
 Work out the missing parts.

$\frac{\square}{\square} \div \frac{\square}{\square} = \frac{4}{36}$

How many different ways can you find?

Think of 3 questions for dividing fractions by a whole number where the answer is $\frac{1}{20}$.

Could you do it? Why? Why not?

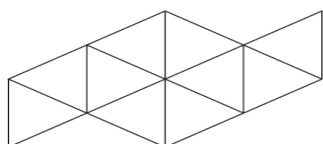
Becky's mum ordered a pizza for her and her friends.

By the time they arrived home there was only $\frac{7}{12}$ of it left. When she shared it among her friends they each got $\frac{7}{72}$.

How many friends did Becky have with her?

LO: I can find fractions and % of amounts.

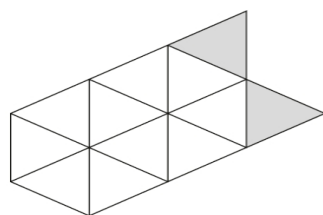
Shade $\frac{1}{6}$ of this shape.



How many triangles would be shaded?

1 mark

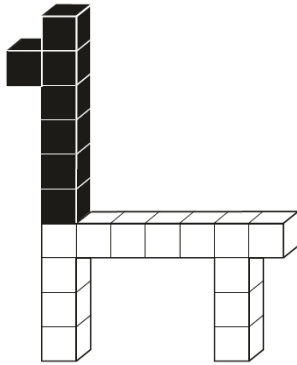
Shade **more** triangles on this shape so that is $\frac{1}{3}$ shaded



1 mark

LO: I can find fractions and % of amounts.

This model is made with 20 cubes.



What **percentage** of the cubes in the model is black?

 %

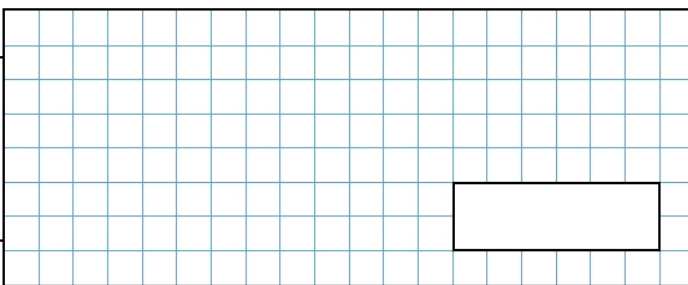
1 mark

LO: I can find fractions and % of amounts.

20% of Megan's number is 64

What is 50% of Megan's number?

Show your method

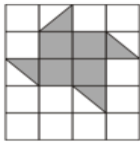


2 marks

LO: I can find fractions and % of amounts.

LQ: Can I find fractions and % of amounts?

1.) Here is a grid of 20 squares.



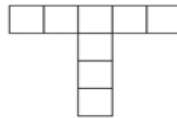
What percentage of the grid is shaded?

 %

2.) Shade **one third** of this shape.



Shade **one quarter** of this shape.



3.) Calculate **5%** of **£3600**

4.) Calculate $\frac{3}{8}$ of **980**

5.) Three-quarters of a number is **48**
What is the number?

6.) John had £5
He gave 25% of it to charity.
How much did he give?

7.) In a class, 18 of the children are girls.
A quarter of the children in the class are boys.
Altogether, how many children are there in the class?

8.) Calculate $\frac{3}{4}$ of **£15**